

RAW SEQUENCE LISTING

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Application Serial Number: 10/591, 678
Source: IFWP
Date Processed by STIC: 09/13/2006

ENTERED



IFWP

RAW SEQUENCE LISTING DATE: 09/13/2006
 PATENT APPLICATION: US/10/591,678 TIME: 10:58:37

Input Set : A:\Sequence Listing ASCII; 2335.0190000.txt
 Output Set: N:\CRF4\09132006\J591678.raw

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3 <110> APPLICANT: EVOTEC NEUROSCIENCES
5 <120> TITLE OF INVENTION: DIAGNOSTIC AND THERAPEUTIC USE OF MAL2 GENE AND PROTEIN
6   FOR NEURODEGENERATIVE DISEASES
8 <130> FILE REFERENCE: 043323wo Me/FM
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/591,678
C--> 11 <141> CURRENT FILING DATE: 2006-09-01
13 <150> PRIOR APPLICATION NUMBER: US 60/549,147
14 <151> PRIOR FILING DATE: 2004-03-03
16 <160> NUMBER OF SEQ ID NOS: 16
18 <170> SOFTWARE: PatentIn Ver. 2.1
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 176
22 <212> TYPE: PRT
23 <213> ORGANISM: Homo sapiens
25 <400> SEQUENCE: 1
26 Met Ser Ala Gly Gly Ala Ser Val Pro Pro Pro Pro Asn Pro Ala Val
27   1           5           10           15
29 Ser Phe Pro Pro Pro Arg Val Thr Leu Pro Ala Gly Pro Asp Ile Leu
30   20           25           30
32 Arg Thr Tyr Ser Gly Ala Phe Val Cys Leu Glu Ile Leu Phe Gly Gly
33   35           40           45
35 Leu Val Trp Ile Leu Val Ala Ser Ser Asn Val Pro Leu Pro Leu Leu
36   50           55           60
38 Gln Gly Trp Val Met Phe Val Ser Val Thr Ala Phe Phe Phe Ser Leu
39   65           70           75           80
41 Leu Phe Leu Gly Met Phe Leu Ser Gly Met Val Ala Gln Ile Asp Ala
42   85           90           95
44 Asn Trp Asn Phe Leu Asp Phe Ala Tyr His Phe Thr Val Phe Val Phe
45   100          105          110
47 Tyr Phe Gly Ala Phe Leu Leu Glu Ala Ala Ala Thr Ser Leu His Asp
48   115          120          125
50 Leu His Cys Asn Thr Thr Ile Thr Gly Gln Pro Leu Leu Ser Asp Asn
51   130          135          140
53 Gln Tyr Asn Ile Asn Val Ala Ala Ser Ile Phe Ala Phe Met Thr Thr
54 145          150          155          160
56 Ala Cys Tyr Gly Cys Ser Leu Gly Leu Ala Leu Arg Arg Trp Arg Pro
57   165          170          175
63 <210> SEQ ID NO: 2
64 <211> LENGTH: 2808
65 <212> TYPE: DNA
66 <213> ORGANISM: Artificial Sequence
68 <220> FEATURE:
69 <223> OTHER INFORMATION: Description of Artificial Sequence:nucleotide

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70     sequence of the human MAL2 cDNA
72 <400> SEQUENCE: 2
73 ggcggcgggcgc gcaggagccc gggaggcgga ggcgggaggc ggcggcgggc gcgggagacg 60
74 cagcagcggc agcggcagca tgcggccggc cggagcgtca gtcccgcgc cccgaaccc 120
75 cgccgtgtcc tccccgcgc cccgggtcac cctgccgcgc ggccccgaca tcctgaggac 180
76 ctactcgggc gccttcgtct gcctggagat tctgttcggg ggtcttgtct ggattttggg 240
77 tgcctcctcc aatgttcctc tacctctact acaaggatgg gtcatgtttg tgtccgtgac 300
78 agcgtttttc ttttcgctcc tctttctggg catgttcctc tctggcatgg tggctcaaatt 360
79 tgatgctaac tggaaacttc tggattttgc ctaccatttt acagtatttg tcttctattt 420
80 tggagccttt ttattggaag cagcagccac atccctgcat gatttgcatt gcaatacaac 480
81 cataaccggg cagccactcc tgagtataaa ccagtataac ataaacgtag cagcctcaat 540
82 ttttgccctt atgacgacag cttgttatgg ttgcagtttg ggtctggctt tacgaagatg 600
83 gcgaccgtaa cactccttag aaactggcag tcgtatgtta gtttcacttg tctactttat 660
84 atgtctgata aatttggata ccattttgtc cagatgcaaa aacattccaa aagtaatgtg 720
85 tttagtagag agagactcta agctcaagtt ctggtttatt tcatggatgg aatgttaatt 780
86 ttattatgat attaaagaaa tggcctttta ttttacatct ccccccttt tccctttccc 840
87 cctttatttt cctccttttc tttctgaaag tttcctttta tgtccataaa atacaaatat 900
88 attgttcata aaaaattagt atcccttttg tttggttgct gagtcacctg aaccttaatt 960
89 ttaattggta attacagccc ctaaaaaaa cacatttcaa ataggcttcc cactaaactc 1020
90 tatattttag tgtaaacag gaattggcac acttttttta gaatgggcca gatggtaaat 1080
91 atttatgctt cacgggtccat acagtctctg tcacaactat tcagttctgc tagtatagcg 1140
92 tgaaagcagc tatacacaat acagaaatga atgagtgtgg ttatgttcta ataaaactta 1200
93 ttataaaaa caaggggagg ctgggtttag cctgtgggcc atagtttgct aaccactggg 1260
94 gtaaacctt agttatatat gatctgcatt ttcttgaact gatcattgaa aacttataaa 1320
95 ctaacagaa aagccacata atatttagtg tcattatgca ataatacat tgcctttgtg 1380
96 ttaatagtca aatacttacc tttggagaat acttaccttt ggaggaatgt ataaaatttc 1440
97 tcaggcagag tcctggatat aggaaaaagt aatttatgaa gtaaacctca gttgcttaat 1500
98 caaactaatg atagtctaac aactgagcaa gatcctcatc tgagagtgtc taaaatggga 1560
99 tccccagaga ccattaacca atactggaac tggatatctag ctactgatgt cttactttga 1620
100 gtttatttat gttcagaat acagttgttt gccctgtgca tgaatatacc catatttgtg 1680
101 tgtggatatg tgaagctttt ccaaatagag ctctcagaag aattaagttt ttacttctaa 1740
102 ttattttgca ttactttgag ttaaatgtga atagagtatt aaatataaag ttgtagattc 1800
103 ttatgtgttt ttgtattagc ccagacatct gtaatgtttt tgcactgggtg acagacaaaa 1860
104 tctgttttaa aatcatatcc agcacaaaaa ctatttctgg ctgaatagca cagaaaagta 1920
105 ttttaacctt cctgtagaga tcctcgtcat ggaaagggtgc caaactgttt tgaatggaag 1980
106 gacaagtaag agtgaggcca cagttccac cacacgaggg cttttgtatt gttctacttt 2040
107 ttcagccctt tactttctgg ctgaagcatc cccttggagt gccatgtata agttgggcta 2100
108 tttagagttc tggaacatag aacaaccatg aatgagtggc atgatccgtg cttaatgatc 2160
109 aagtgttact tatctaataa tcctctagaa agaaccctgt tagatcttgg tttgtgataa 2220
110 aaatataaag acagaagaca tgaggaaaaa caaagggttt gaggaatca ggcataatgac 2280
111 ttataactta acatcagatc ttttctataa tatcctacta ctttggtttt cctagctcca 2340
112 taccacacac ctaaacctgt attatgaatt acatattaca aagtcataaa tgtgccatat 2400
113 ggatatacag tacattctag ttggaatcgt ttactctgct agaatttagg tgtgagattt 2460
114 tttgtttccc aggtatagca ggcttatgtt tgggtggcatt aaattggttt ctttaaaatg 2520
115 ctttgggtggc acttttgtta acagattgct tctagattgt tacaaccaa gcctaagaca 2580
116 catctgtgaa tacttagatt tgtagcttaa tcacattcta gacttgtgag ttgaatgaca 2640
117 aagcagttga acaaaaatta tggcatttaa gaatttaaca tgtcttagct gtaaaaatga 2700
118 gaaagtgttg gttgggttta aaatctggta actccatgat gaaaagaaat ttattttata 2760
119 cgtgttatgt ctctaataaa gtattcattt gataaaaaaa aaaaaaaa 2808

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122 <210> SEQ ID NO: 3
123 <211> LENGTH: 270
124 <212> TYPE: DNA
125 <213> ORGANISM: Artificial Sequence
127 <220> FEATURE:
128 <223> OTHER INFORMATION: Description of Artificial Sequence:nucleotide
129     sequence of the 270 bp MAL2 cDNA fragment
131 <400> SEQUENCE: 3
132 tgggtggcact tttgtaaaca gattgcttct agattgttac aaaccaagcc taagacacat 60
133 ctgtgaatac ttagatttgt agcttaatca cattctagac ttgtgagttg aatgacaaag 120
134 cagttgaaca aaaattatgg catttaagaa tttaacatgt cttagctgta aaaatgagaa 180
135 agtgttgggtt gggttttaaaa tctggtaact ccatgatgga aagaaattta ttttatacgt 240
136 gttatgtctc taataaaagta ttcatttgat                270
139 <210> SEQ ID NO: 4
140 <211> LENGTH: 531
141 <212> TYPE: DNA
142 <213> ORGANISM: Artificial Sequence
144 <220> FEATURE:
145 <223> OTHER INFORMATION: Description of Artificial Sequence:coding sequence
146     of the human MAL2 gene
148 <400> SEQUENCE: 4
149 atgtcggccg gcggagcgtc agtcccgcgc cccccgaacc cgcgcgtgtc cttcccgcgc 60
150 ccccggttca cctgcccgc cggccccgac atcctgcgga cctactcggg cgccttcgtc 120
151 tgcctggaga ttctgttcgg gggctctgtc tggattttgg ttgcctcctc caatgttcct 180
152 ctacctctac tacaaggatg ggtcatgttt gtgtccgtga cagcgttttt cttttcgctc 240
153 ctctttcttg gcatgttcct ctctggcatg gtggctcaaa ttgatgctaa ctggaacttc 300
154 ctggattttg cctaccattt tacagtattt gtcttctatt ttggagcctt tttattggaa 360
155 gcagcagcca catccctgca tgatttgcac tgcaatacaa ccataaccgg gcagccactc 420
156 ctgagtgata accagtataa cataaacgta gcagcctcaa tttttgcctt tatgacgaca 480
157 gcttgttatg gttgcagttt gggctcggct ttacgaagat ggcgaccgta a          531
160 <210> SEQ ID NO: 5
161 <211> LENGTH: 23
162 <212> TYPE: DNA
163 <213> ORGANISM: Artificial Sequence
165 <220> FEATURE:
166 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
167     human MAL2 gene
169 <400> SEQUENCE: 5
170 acctgtagag atcctcgtca tgg                                23
173 <210> SEQ ID NO: 6
174 <211> LENGTH: 23
175 <212> TYPE: DNA
176 <213> ORGANISM: Artificial Sequence
178 <220> FEATURE:
179 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
180     human MAL2 gene
182 <400> SEQUENCE: 6
183 tggcctcact cttacttgct ctt                                23
186 <210> SEQ ID NO: 7

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187 <211> LENGTH: 20
188 <212> TYPE: DNA
189 <213> ORGANISM: Artificial Sequence
191 <220> FEATURE:
192 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
193 human cyclophilin B gene
195 <400> SEQUENCE: 7
196 actgaagcac tacgggcctg 20
199 <210> SEQ ID NO: 8
200 <211> LENGTH: 19
201 <212> TYPE: DNA
202 <213> ORGANISM: Artificial Sequence
204 <220> FEATURE:
205 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
206 human cyclophilin B gene
208 <400> SEQUENCE: 8
209 agccgttggt gtctttgcc 19
212 <210> SEQ ID NO: 9
213 <211> LENGTH: 20
214 <212> TYPE: DNA
215 <213> ORGANISM: Artificial Sequence
217 <220> FEATURE:
218 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
219 human ribosomal protein S9 gene
221 <400> SEQUENCE: 9
222 ggtcaaattt accctggcca 20
225 <210> SEQ ID NO: 10
226 <211> LENGTH: 22
227 <212> TYPE: DNA
228 <213> ORGANISM: Artificial Sequence
230 <220> FEATURE:
231 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
232 human ribosomal protein S9 gene
234 <400> SEQUENCE: 10
235 tctcatcaag cgtcagcagt tc 22
238 <210> SEQ ID NO: 11
239 <211> LENGTH: 19
240 <212> TYPE: DNA
241 <213> ORGANISM: Artificial Sequence
243 <220> FEATURE:
244 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
245 human beta-actin gene
247 <400> SEQUENCE: 11
248 tggaacggtg aaggtgaca 19
251 <210> SEQ ID NO: 12
252 <211> LENGTH: 19
253 <212> TYPE: DNA
254 <213> ORGANISM: Artificial Sequence
256 <220> FEATURE:

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257 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
258     human beta-actin gene
260 <400> SEQUENCE: 12
261 ggcaagggac ttcctgtaa                                19
264 <210> SEQ ID NO: 13
265 <211> LENGTH: 20
266 <212> TYPE: DNA
267 <213> ORGANISM: Artificial Sequence
269 <220> FEATURE:
270 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
271     human GAPDH gene
273 <400> SEQUENCE: 13
274 cgtcatgggt gtgaaccatg                                20
277 <210> SEQ ID NO: 14
278 <211> LENGTH: 21
279 <212> TYPE: DNA
280 <213> ORGANISM: Artificial Sequence
282 <220> FEATURE:
283 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
284     human GAPDH gene
286 <400> SEQUENCE: 14
287 gctaagcagt tgggtgtgca g                                21
290 <210> SEQ ID NO: 15
291 <211> LENGTH: 21
292 <212> TYPE: DNA
293 <213> ORGANISM: Artificial Sequence
295 <220> FEATURE:
296 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
297     human transferrin receptor TRR gene
299 <400> SEQUENCE: 15
300 gtcgctgggc agttcgtgat t                                21
303 <210> SEQ ID NO: 16
304 <211> LENGTH: 23
305 <212> TYPE: DNA
306 <213> ORGANISM: Artificial Sequence
308 <220> FEATURE:
309 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
310     human transferrin receptor TRR gene
312 <400> SEQUENCE: 16
313 agcagttggc tgtgtacct ctc                                23

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VERIFICATION SUMMARY

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L:10 M:270 C: Current Application Number differs, Replaced Current Application Number

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date